

September 5, 2002

Mr. Arthur G. Gravenstein, P.E.
Staff Engineer
Bureau of Corrective Actions -- Remediation Branch
Nevada Division of Environmental Protection
333 W. Nye Lane
Carson City, Nevada 89701

Subject: Technical Memorandum for Wabuska Drain Investigations

Atlantic Richfield has received your letter dated August 13, 2002 regarding our initial responses (dated July 19, 2002) to regulatory comments pertaining to the Draft Wabuska Drain Work Plan, dated April 30, 2002. As discussed during the July 16, 2002 Yerington Technical Work Group (YTWG) meeting, investigations of the Wabuska Drain will be conducted in a phased approach. The initial phase will likely be restricted to soil and sediment sampling because no flowing water has been observed in the southern end of the Drain based upon weekly observations. Please accept this letter as the Technical Memorandum requested in NDEP's request to clarify activities to be undertaken under the first phase of Wabuska Drain sampling.

Atlantic Richfield agrees that sampling surface sediments should not be delayed, and will attempt to complete this first phase by October 1, 2002. However, as you know, the scheduled August 29, 2002 site walk by YTWG members to select soil/sediment sampling sites had to be cancelled due to private property access issues. We are currently working with NDEP to gain access to the parcels identified to occur along the Wabuska Drain alignment. Final completion of the first phase of site investigations will be dependent on site access approvals.

Once access to these parcels has been obtained, Atlantic Richfield will proceed with the site walk and sampling event. In order to ensure that the detection limits for this first phase of sampling are adequate, analytical detection limits for metals concentrations will be consistent with U.S. Environmental Protection Agency criteria for freshwater sediment benchmarks (e.g., MacDonald et al., 2000) and the US Department of Energy terrestrial plant toxicity benchmarks (<http://www.esd.ornl.gov/programs/ecorisk/reports.html>).

If water quality samples are collected during this first phase, currently scheduled for completion by October 1, 2002, analytical detection limits for metals concentrations in surface water will be consistent with U.S. EPA criteria for freshwater chronic ambient

water quality (e.g., http://oaspub.epa.gov/wqsdatabase/epa.rep_parameter). These detection limits, as practicable, will also be used for the second phase of Wabuska Drain site investigations. Due to potential matrix effects in surface water samples, detection limits for some metals may vary from sample to sample.

As stated in our Response to Comments dated July 9, 2002, Atlantic Richfield does not necessarily agree with using these criteria for assessing ecological risk in an agricultural drain. However, in the spirit of moving forward with the Wabuska Drain investigations, we will attempt to contract with a laboratory that can achieve the referenced detection limits. Other quality assurance measures, in addition to those cited in the Draft Wabuska Drain Work Plan, will include:

- The use of Method 6010B;
- The use of a plastic trowel; and
- For water samples, not icing metals in the field given the possibility of cold temperatures causing precipitation.

If you have any questions regarding this Technical Memorandum or our approach to the Wabuska Drain investigations, please contact me at 1-406-563-5211 ext. 430.

Sincerely,

Dave McCarthy
Project Manager